

# AGENDA

## Denver Board of Water Commissioners

Denver Water Administration Building  
1600 West 12<sup>th</sup> Avenue  
Denver, CO  
Board Room, First Floor

Wednesday, January 8, 2020 **9:30 a.m.**

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### I. INTRODUCTORY BUSINESS

#### A. Call to Order and Determination of Quorum

#### B. Public Comment and Communications

At this point in the agenda, the Board may allow members of the public to address the Board on any item of interest within the jurisdiction of the board, and not on the agenda for action. Speakers wishing to address a specific Action Item will be invited to address the board when the item is being considered. Three minutes are allowed for each person unless the President determines otherwise.

1. Distributor Communications
2. Citizen Advisory Committee Communications

#### C. Ceremonies, Awards and Introductions

#### D. Legislative Update

### II. ACTION ITEMS

#### A. Consent Items

Items listed below are considered routine and may be enacted by one motion and vote. If any Board member desires discussion beyond explanatory questions, or corrections to the Minutes, the President may order that item to be considered in a separate motion and vote.

1. Minutes from December 4, 2019 Board Meeting
2. Minutes from December 11, 2019 Board Meeting
3. Twenty-first Amendment for Additional Contract Funds for Oracle America Inc – Contract 500125
4. Temporary Staffing Services – Contract 504100
5. Total Rewards Actuarial and Consulting Services – Contract 504145

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## **B. Individual Approval Items**

- |  |                |            |
|--|----------------|------------|
| 1. Lead Reduction Program  | Alexis Woodrow | 30 minutes |
| a. Third Amendment to Agreement with Mott MacDonald, LLC – Contract 504012   |                |            |
| b. Pitcher Filters for Lead Reduction Program – Contract 504210  |                |            |
| c. Accelerated Lead Service Line Replacement for Lead Reduction Program – Contracts 504293, 504294, 504295, 504296, and 504297 |                |            |

## **III. POLICY MATTERS**

- |  |                |            |
|--|----------------|------------|
| <b>A. Program Options for Advanced Lead Service Line Replacement</b> | Jim Lochhead   | 20 minutes |
| <b>B. Northwater Treatment Plant MWBE Update</b>                     | Pete McCormick | 10 minutes |
| <b>C. Guided Fishing on the South Platte River</b>                   | Brandon Ransom | 15 minutes |

## **IV. EXECUTIVE UPDATE**

- A. CEO Update**
- B. CFO Update**
- C. Operations Update**

## **V. BRIEFING PAPERS & REPORTS**

### **A. Briefing Papers**

- 1. Program Options for Advanced Lead Service Line Replacement
- 2. Year-to-Date Continuous Improvement Update

### **B. Reports**

## **VI. ADJOURNMENT**

## **VII. TRUSTEE MATTERS**

## **VIII. EXECUTIVE SESSION**

The Board may adjourn the regular meeting and reconvene in executive session on topics authorized by  
D.R.M.C. Sec. 2-34

### **A. Confidential Report D.R.M.C. Sec. 2-34**

# DENVER BOARD OF WATER COMMISSIONERS

Meeting Date: January 8, 2020

Board Item: II-A-3

## Twenty-first Amendment for Additional Contract Funds for Oracle America Inc Contract 500125

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Action by Consent

Individual Action

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### **Purpose and Background:**

Denver Water uses software from Oracle for databases that store information for its financial, asset management and customer care / billing systems. In order to keep those databases up-to-date, there is a need to purchase extended software support so that staff can download critical operational and security patches. The purchase of this extended support is governed by the Oracle Public Sector Technical Service Agreement and Technical Support Policy that governs Denver Water's existing Oracle Support Service contracts.

### **Budget and Schedule:**

The requested amendment amount of \$28,331.09 will increase the total amount of this contract to \$3,936,580.04 and the term of the contract is May 31, 2001 to June 1, 2020. Funds for this contract will come from the 2020 budget of IT Infrastructure and Technology, which has sufficient funds to pay the \$28,331.09 that is needed in 2020.

### **S/MWBE Information:**

S/MWBE is not applicable for this item.

### **Recommendation:**

It is recommended that the Board approve the Twenty-first Amendment to Contract 500125 with Oracle America Inc for the purchase of additional database license set with extended support for the current contract period through June 1, 2020 for an addition of \$28,331.09 for a total amended contract amount not to exceed \$3,936,580.04.

### **Approvals:**

- James S. Lochhead, CEO/Manager
- Julie Anderson, Chief of Staff
- Jessica R. Brody, General Counsel
- Angela C. Bricmont, Chief Financial Officer

- Brian D. Good, Chief Administrative Officer
- Mike King, Chief External Affairs Officer
- Robert J. Mahoney, Chief Engineering Officer
- Thomas J. Roode, Chief Operations Officer

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# DENVER BOARD OF WATER COMMISSIONERS

Meeting Date: January 8, 2020

Board Item: II-A-4

## Temporary Staffing Services Contract 504100

Action by Consent

Individual Action

### **Purpose and Background:**

Denver Water utilizes temporary staffing services to augment its regular personnel due to the seasonal nature of certain work or to fill a temporary gap for work that does not support hiring a full-time employee. For example, temporary staffing agencies will provide utility technicians for seasonal increases in workload or Call Center representatives during periods of high call volume, such as peak irrigation season. The expanded use of staffing agencies is key to Denver Water's staffing strategy and helps Denver Water operate efficiently and effectively without adding regular personnel

To provide the business with the skilled employees for the available positions, it's important to have staffing providers who offer a range of needed skillsets. The agreements in place with our current temporary staffing providers will expire on March 31, 2020. As such, Denver Water conducted a Competitive Selection for Temporary Staffing.

### **Budget and Schedule:**

The total amount of this contract is \$5,000,000 and the term of the contract is January 8, 2020 to March 31, 2023. Funds for this service will come from the 2020 budget. which has sufficient funds to pay the \$1,985,238 estimated to be needed in 2020. The remaining \$3,014,762 will be budgeted in 2021 - March 31, 2023.

### **Selection of Business Partner:**

On August 8, 2019, Denver Water issued a Request for Qualifications (RFQ) on Rocky Mountain E-Purchasing System. Denver Water received 21 responses. Of those 21, 11 were Small Business Enterprises, seven were Minority Business Enterprises, and five were Women-owned Business Enterprises. Fifteen companies qualified to progress to the Request for Proposals (RFP) stage of the competitive selection process and were invited to participate in a private RFP process. Denver Water evaluated each of the Proposals and recommends awarding five companies to provide specific staffing services as follows:

1. Colorado Network Staffing – all divisions (SBE WBE)
2. Cogent Infotech – all divisions (SBE)
3. Compri Consulting Services – Finance and IT (SBE)
4. Ajilon – Finance and Administrative
5. The Doyle Group – IT (SBE)

These agreements are being submitted under a single board item because they were bid under the same competitive selection process.

### **S/MWBE Information:**

Small/Minority and Women-owned Business Enterprise goals are not applicable for this item. However, four of the recommended companies are Small Business Enterprises, one is a Women-owned Business Enterprise.

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**Recommendation:**

It is recommended that the Board approve Agreement 504100 for temporary staffing services for the contract period January 8, 2020 – March 31, 2023 for a total contract amount not to exceed \$5,000,000, with:

1. Colorado Network Staffing Inc.
2. Ajilon Professional Staffing
3. The Doyle Group
4. Compri Consulting, Inc.
5. Cogent Infotech

**Approvals:**

- |   |   |
|---|---|
| <input checked="" type="checkbox"/> James S. Lochhead, CEO/Manager              | <input type="checkbox"/> Brian D. Good, Chief Administrative Officer  |
| <input checked="" type="checkbox"/> Julie Anderson, Chief of Staff              | <input type="checkbox"/> Mike King, Chief External Affairs Officer    |
| <input type="checkbox"/> Jessica R. Brody, General Counsel                      | <input type="checkbox"/> Robert J. Mahoney, Chief Engineering Officer |
| <input checked="" type="checkbox"/> Angela C. Bricmont, Chief Financial Officer | <input type="checkbox"/> Thomas J. Roode, Chief Operations Officer    |

# DENVER BOARD OF WATER COMMISSIONERS

Meeting Date: January 8, 2020

Board Item: II-A-5

## Total Rewards Actuarial and Consulting Services Contract 504145

Action by Consent

Individual Action

### **Purpose and Background:**

The Board requires total rewards consulting services to support the work of Denver Water staff to meet the objectives and goals of the Total Rewards philosophy. The consulting services include, strategic consulting on the Board's Total Rewards program, financial reporting, actuarial, broker and compensation services, and work related to plan compliance and governance.

### **Budget and Schedule:**

The total amount of this contract is \$1,567,136 and the term of the contract is January 8, 2020 – December 11, 2024. Funds for this service will come from the 2020 budget for Benefits Administration, which has sufficient funds to pay the \$470,000 estimated to be needed in 2020. The remaining \$1,097,136 will be budgeted in years 2021 through 2024.

### **Selection of Business Partner:**

On September 24, 2019, Denver Water issued a Request for Proposal (RFP) on Rocky Mountain E-Purchasing System. Denver Water received six proposals. Denver Water evaluated each of the proposals and recommends awarding AON Consulting, Inc.

### **S/MWBE Information:**

S/MWBE is not applicable for this item.

### **Recommendation:**

It is recommended that the Board approve Agreement 504145 with AON Consulting, Inc. for Total Rewards actuarial and consulting services for the contract period January 8, 2020 – December 11, 2024 for a total contract amount not to exceed \$1,567,136.

### **Approvals:**

- James S. Lochhead, CEO/Manager
- Julie Anderson, Chief of Staff
- Jessica R. Brody, General Counsel
- Angela C. Bricmont, Chief Financial Officer

- Brian D. Good, Chief Administrative Officer
- Mike King, Chief External Affairs Officer
- Robert J. Mahoney, Chief Engineering Officer
- Thomas J. Roode, Chief Operations Officer

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# DENVER BOARD OF WATER COMMISSIONERS

Meeting Date: January 8, 2020

Board Item: II-B-1-a

## Third Amendment to Agreement with Mott MacDonald, LLC Contract 504012

Action by Consent

Individual Action

### **Purpose and Background:**

On May 15, 2019, Denver Water entered into Contract 504012 with Mott MacDonald, LLC (Mott) for program management services in support of Denver Water's effort to secure a variance from the Safe Drinking Water Act's corrosion control treatment requirements under the Lead and Copper Rule. Under the original scope of work, Mott's scope was limited to Phase I, which covered the development of: a lead reduction program, a filter pilot study, a lead service line (LSL) inventory, a lead service line replacement program, a program management plan, and a communications, outreach and education plan. In addition, under Phase I, Mott provided general program management support among other services.

With the U.S. Environmental Protection Agency's (EPA) approval of the variance request on December 16, 2019, Denver Water is now preparing to implement its Lead Reduction Program. Under the third amendment to the contract, the scope of work will be modified to add "Phase II" which consists of implementation of the Lead Reduction Program. Under Phase II, Mott will:

- Develop a program management plan, quality management plan, a safety plan, and program controls and reporting for Phase II.
- Provide program management services for accelerated LSL replacement, including review of invoices, budget tracking, schedule and workflow management, construction management, permit management, and tracking of metrics.
- Provide program management for Denver Water's filter distribution program, including tracking of filters, review of invoices, budget tracking, schedule management, and tracking of metrics.
- Provide regulatory and water quality management support, including the tracking and reporting of program metrics, running of exposure model for variance compliance determination, management of water quality sampling requirements, management of compliance with flushing requirements, and testing of filters.
- Track LSL inventory further refine inventory using predictive model developed under Phase I, and assist with prioritization of LSL replacements.
- Augment Denver Water's communication, outreach and education efforts.
- Other implementation support services as described in the third amendment statement of work.

In addition, under the third amendment, the contract term will be extended to January 31, 2021, and the contract terms will be modified based upon the nature of the additional work being performed under Phase II.

### **Budget and Schedule:**

Funds for this contract were not budgeted in the 2020 budget based on the uncertainty of EPA approval of Denver Water's variance request. The total amount of this amendment is \$15,165,653 and the term of the contract is May 15, 2019 to January 31, 2021. It is anticipated that a variance will be required to the 2020 budget that will include the entire LRP program and funds for this contract.

### **Selection of Business Partner:**

A Request for Proposal describing the work to be completed in Phase I was issued on April 1, 2019 to eight firms and posted on denverwater.org. Proposals were received from five firms on April 15, 2019.

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Based upon an objective review of proposals, the selection team interviewed four firms. Mott was selected as the program manager for Phase I and Phase II of the LRPP and has subcontracted with AECOM Technical Services, Inc., GBSM (public relations) and Corona Environmental Consulting. Both Mott and AECOM Technical Services, Inc. have experience with lead response efforts conducted or currently being conducted in several major U.S. cities.

**S/MWBE Information:**

Due to the specialized nature of the work requiring experience with lead programs in other large cities around the U.S. and the expedited schedule, significant opportunities for MWBE participation were not present and participation was not achieved with this contract.

**Recommendation:**

It is recommended that the Board approve the third amendment to Contract 504012 with Mott MacDonald, LLC for the Lead Reduction Program Plan and for an addition of \$15,165,653 for a total amended contract amount not to exceed \$18,384,007 and extend the term of the contract through January 31, 2021.

**Approvals:**

- |   |   |
|---|---|
| <input checked="" type="checkbox"/> James S. Lochhead, CEO/Manager              | <input type="checkbox"/> Brian D. Good, Chief Administrative Officer          |
| <input type="checkbox"/> Julie Anderson, Chief of Staff                         | <input type="checkbox"/> Mike King, Chief External Affairs Officer            |
| <input type="checkbox"/> Jessica R. Brody, General Counsel                      | <input type="checkbox"/> Robert J. Mahoney, Chief Engineering Officer         |
| <input checked="" type="checkbox"/> Angela C. Bricmont, Chief Financial Officer | <input checked="" type="checkbox"/> Thomas J. Roode, Chief Operations Officer |

# DENVER BOARD OF WATER COMMISSIONERS

Meeting Date: January 8, 2020

Board Item: II-B-1-b

## Pitcher Filters for Lead Reduction Program Contract 504210

Action by Consent

Individual Action

### **Purpose and Background:**

In September 2019, Denver Water applied to the U.S. Environmental Protection Agency (EPA) for a variance from under the Safe Drinking Water Act's corrosion control treatment requirements. Under the variance, Denver Water sought approval to implement a comprehensive Lead Reduction Program (LRP) in place of orthophosphate treatment. EPA approved Denver Water's application on December 16, 2019, concluding that Denver Water's LRP "provides a holistic and permanent lead reduction approach that is as effective at protecting public health, more efficient in reducing exposure to lead in drinking water, less harmful to the environment, more equitable in its public health benefits and more cost-effective, as compared to orthophosphate treatment."

A critical element of the LRP is the distribution of pitcher filters and replacement cartridges to all customers with a known, suspected or possible lead service line until six months after their service line is replaced. Denver Water estimates that based on its current lead service line inventory, it must distribute filters to approximately 106,000 eligible customers, with the initial distribution of filters completed by June 30, 2020, and reoccurring distribution of replacement cartridges occurring every six months.

Under Contract 504210, Denver Water will be contracting with 120WaterAudit, a company headquartered in Indiana that has distributed filters for Pittsburgh Water and Sewer Authority's filter distribution program. 120WaterAudit will be responsible for procuring goods in the form of pitcher filters and cartridges; receiving, inspecting, storing, and managing inventories of filters and cartridges; packaging of shipments; management of shipments directly to Denver Water customers; and receiving and processing returns, in accordance with a distribution schedule provided by Denver Water. 120WaterAudit will subcontract with Brita to provide filters and replacement cartridges that meet Denver Water's specifications, however, 120WaterAudit will be responsible for ensuring that the filters meet specifications and filters and replacement cartridges are provided in amounts and frequencies to meet Denver Water's requirements.

### **Budget and Schedule:**

Funds for this contract were not included in the 2020 budget based on the uncertainty of EPA approval of Denver Water's variance request. It is anticipated that the budget required for this contract for 2020 will be \$7,084,000. The duration of this contract is January 8, 2020 to December 31, 2022, with a total contract amount of \$17,297,000. It is anticipated that a variance to the overall 2020 budget that includes the entire LRP program will be required.

### **Selection of Business Partner:**

Denver Water received proposals from seven vendors and were evaluated based upon meeting the following minimum criteria:

- Certification: The pitcher filters and replacement cartridges shall be certified by an accredited certification organization including the National Sanitation Foundation (NSF) International or the Water Quality Association to meet or exceed NSF Standard 53 for lead reduction.
- Fluoride: Filter must minimize the removal of fluoride.
- Water Chemistry: Filter must not alter water chemistry, such as alkalize the water.
- Pitcher Material and Pitcher Size: Pitcher must be made from plastic and must be at least 8-cups in size.

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A six-member committee received, reviewed, and scored each proposal based on criteria established in the RFP. Evaluation criteria included ease of use; the ability of a supplier and/or distributor to meet an accelerated schedule; if the filters remove fluoride; safety factors, sustainability, pitcher size, advanced software, and prior similar experience. The results of the evaluation revealed that Brita combined with 120WaterAudit are the preferred supplier and distributor for the LRP Filter Program.

**S/MWBE Information:**

S/MWBE goals are not applicable for this item.

**Recommendation:**

It is recommended that the Board approve Contract 504210 with 120WaterAudit for pitcher filter supply and distribution for the contract period January 8, 2020 to December 31, 2022 for a total contract amount not to exceed \$17,297,000.

**Approvals:**

- |   |   |
|---|---|
| <input checked="" type="checkbox"/> James S. Lochhead, CEO/Manager              | <input type="checkbox"/> Brian D. Good, Chief Administrative Officer          |
| <input type="checkbox"/> Julie Anderson, Chief of Staff                         | <input type="checkbox"/> Mike King, Chief External Affairs Officer            |
| <input type="checkbox"/> Jessica R. Brody, General Counsel                      | <input type="checkbox"/> Robert J. Mahoney, Chief Engineering Officer         |
| <input checked="" type="checkbox"/> Angela C. Bricmont, Chief Financial Officer | <input checked="" type="checkbox"/> Thomas J. Roode, Chief Operations Officer |

# DENVER BOARD OF WATER COMMISSIONERS

Meeting Date: January 8, 2020

Board Item: II-B-1-c

## **Accelerated Lead Service Line Replacement for Lead Reduction Program Contracts 504293, 504294, 504295, 504296, and 504297**

Action by Consent

Individual Action

### **Purpose and Background:**

In September 2019, Denver Water applied to the U.S. Environmental Protection Agency (EPA) for a variance from under the Safe Drinking Water Act's corrosion control treatment requirements. Under the variance, Denver Water sought approval to implement a comprehensive Lead Reduction Program (LRP) in place of orthophosphate treatment. EPA approved Denver Water's application on December 16, 2019, concluding that Denver Water's LRP "provides a holistic and permanent lead reduction approach that is as effective at protecting public health, more efficient in reducing exposure to lead in drinking water, less harmful to the environment, more equitable in its public health benefits and more cost-effective, as compared to orthophosphate treatment."

A critical element of the LRP is to replace 7% of lead service lines (LSLs) per year. Another key element of the LRP is to develop an inventory of LSLs within the system through the use of a predictive model that identifies the likely location of LSLs and prioritizes them for replacement based on greatest ability to reduce lead levels, equity in its public health benefits and efficiency. The predictive model has been utilized to identify approximately 64,000 LSLs in the system and has been utilized to prioritize 4,477 LSLs (7%) for replacement during the first year of the LRP. These contracts will allow the prioritized LSLs to be packaged into task orders to be issued to contractors for confirmation of lead material through potholing and replacement if lead is discovered.

### **Budget and Schedule:**

Funds for these contracts were not included in the 2020 budget based on the uncertainty of EPA approval of Denver Water's variance request. It is anticipated that the budget required for potholing and replacement of LSLs for 2020 will be \$47,000,000. The duration of these contracts is January 8, 2020 to January 8, 2021, with the option to extend for two additional years. It is anticipated that a variance to the overall 2020 budget that includes the entire LRP program will be required.

### **Selection of Business Partner:**

An openly advertised prequalification process was conducted with ten contractors submitting. Seven contractors were prequalified to do the work based on similar project experience, their proposed approach to meet the goals of the LRP, and their demonstrated capacity to complete the work. The seven prequalified contractors were invited to provide pricing for a typical task order. Pricing received was generally higher than anticipated by program estimates and interviews were conducted with all seven prequalified contractors to understand the risks associated with their proposals. Based on the feedback received, the contract documents were modified to reduce uncertainty to the contractors and clarify assumptions of risk. This included assistance from program staff to achieve customer consent prior to construction, greater customer coordination by program staff, simplification of the bid pricing structure and providing greater assurance of additional work awarded based on contractor performance. Revised pricing proposals resulted in approximately a 20% reduction in total program pricing amongst the five lowest priced contractors, whose combined services through individual task orders can meet the LRP replacement goal. It is recommended the following five lowest price contractors be awarded contracts:

- AGL Corporation
- Global Underground Corporation
- K.R. Swerdfeger Construction

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- Mid-City Corporation
- Reynolds Construction

**S/MWBE Information:**

A target goal of 5% minimum MWBE participation was requested in the request for proposals. Each of the five contractors committed to achieving this goal.

**Recommendation:**

It is recommended that the Board approve unit priced contracts to the five lowest price contractors. It is also recommended that the Board delegate authority to the CEO to issue task orders to these contractors to reach the target of 4,477 LSLs replaced, but not to exceed \$47,000,000 in 2020. Issuance of task orders will be made based on lowest cost and capacity to complete the work. Status of contract performance and task order issuance will be reported to the Board monthly throughout 2020.

**Approvals:**

- |   |   |
|---|---|
| <input checked="" type="checkbox"/> James S. Lochhead, CEO/Manager              | <input type="checkbox"/> Brian D. Good, Chief Administrative Officer          |
| <input type="checkbox"/> Julie Anderson, Chief of Staff                         | <input type="checkbox"/> Mike King, Chief External Affairs Officer            |
| <input type="checkbox"/> Jessica R. Brody, General Counsel                      | <input type="checkbox"/> Robert J. Mahoney, Chief Engineering Officer         |
| <input checked="" type="checkbox"/> Angela C. Bricmont, Chief Financial Officer | <input checked="" type="checkbox"/> Thomas J. Roode, Chief Operations Officer |

# DENVER BOARD OF WATER COMMISSIONERS

Meeting Date: January 8, 2020

Board Item: V-A-1

## Briefing Paper for Program Options for Advanced Lead Service Line Replacement

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### Strategic Plan Alignment

Lenses:  Customer Centric  Industry Leader  Long-Term View

The Lead Reduction Program aligns with Denver Water's Strategic Plan by ensuring we are delivering clean, safe drinking water to our customers and community.

### Summary

The Lead Reduction Program Plan (LRPP) sets program goals that include the scheduled removal of an estimated 64,000 lead service lines over the course of the next 15 years. As part of the program, we anticipate customers and developers will perform unscheduled LSL replacements, either on a voluntarily basis or to comply with the Operating Rules. Per the Board's request, this briefing paper provides options for reimbursing customers and developers who remove their lead service lines in advance of the Lead Service Line Replacement Program's scheduled removal.

### Background

On November 20<sup>th</sup>, the Board considered policy questions for implementing a lead service line replacement reimbursement program for customers and developers replacing their lead service lines in advance of the LRPP scheduled replacement. Based on that discussion, staff is drafting a policy resolution for the Board's consideration to provide direction on those questions.

As part of the discussion, Board members indicated interest in reimbursing homeowners and developers for unscheduled LSL replacement at a discounted rate, beginning in 2020, subject to the following conditions:

1. The customer's LSL is not scheduled to be replaced in the current calendar year, or in the next calendar year based on Denver Water's forecast for the upcoming year.
2. The customer's LSL replacement would not conflict with the City and other local jurisdiction's paving moratoriums for recently paved streets.

The Board directed staff to develop options for the discounted rate of reimbursement, including options to consider affordability, potentially using a sliding scale to address concerns of low-income ratepayers subsidizing more affluent customers. Staff considered the overall program benefits of offering reimbursement to these customers, potential reimbursement rates, an analysis of affordability in our service area, and annual budget implications.

#### Program Benefits

Accelerated replacements have the overall program benefit of lowering long term water filter and program management costs. Additionally, accelerated replacements will be considered on top of our annual 7% replacement rate, allowing us a safety factor towards our long-term program goals.

### Amount of Reimbursement

In considering the amount of reimbursement, it is important to recognize that the cost for an individual LSL replacement is likely to be less on average than the program cost to Denver Water for scheduled LSL replacements. This is particularly true in the first year, when contractors are unsure of the risks associated with high volume LSL replacements. In order to determine an average potential individual LSL replacement cost, staff considered the average cost of lines removed as part of the DURA loan program. That average cost was \$7,600 per LSL replacement. We recommend the Board set the discounted reimbursement rate as a percent of this amount in 2020.

Incenting customers to take advantage of a reimbursement rate would have several advantages. Customers would recover a portion of their costs, the LSL replacement program would be accelerated, and Denver Water ratepayers would benefit from reduced cost of LSL replacement and filter distribution. In order to propose what that percentage might be, staff reached out to a consultant to see if we could identify a potential tipping point that would incent customers to participate in an advanced replacement program. The consultant indicated it would take at least three months to complete this analysis. Therefore, in order to proceed forward in 2020, we recommend setting the percentage of reimbursement at 50% of \$7,600 (the DURA loan program average customer cost) as a pilot in 2020. During this pilot, we would gather data to regarding customers who elect to utilize this option. Based on the acceptance rate, we will work with the consultant to develop a recommendation for future years.

### Affordability

The Board raised concerns as to whether a reimbursement program addresses affordability issues, including whether low income customers would be subsidizing more affluent customers. One consideration is whether low income homeowners would participate in a reimbursement program with less than 100% reimbursement. An indication of customer demand for a program to make LSL replacement more affordable is the acceptance of Denver Water's sponsored DURA program to fund and subsidize LSL replacement through a perpetually deferred loan. This program was seldom used by low income customers. The DURA program had 2 participants who qualified as low income, while the remaining 60 applicants either denied a background check or opted to pay the 2% maximum interest on the loan.

Absent a study, we can make some assumptions about reimbursement rates: the higher the rate of reimbursement, the more likely it is that customers will be incentivized to replace their lines. We can also assume from participation in the DURA program that low income customers will not be incented to replace their lines unless they are fully reimbursed (if they are incented at all). It is also important to note that the LRPP addresses social equity issues by targeting and prioritizing low-income and at-risk neighborhoods for LSL replacements. Filters will also address equity issues as they will be provided to all customers with known, suspected, and possible LSLs.

## **Budget**

Due to the uncertainty of demand on a reimbursement program and in order to manage the budget, staff proposes to implement an annual cap on a LSL replacement reimbursement program during the first year (2020) of \$2.2 million, as part of the amended budget for the LSL replacement program. The cap would be based on a formula that considers the historic annual rate of lead service line

replacements completed by individual customers and developers, at a rate of 50% of the historic average DURA individual LSL replacement cost as discussed above, plus a 10% safety factor in the event of increased customer demand for the program.

## Affordability Alternatives

In order to address the Board's concerns related to the issue of low-income customers subsidizing more affluent customers, staff developed four alternatives:

1. Assessed Property Value: Denver Water administers a program that reimburses homeowners on a sliding scale based upon assessed property value. This would require us to obtain the property's assessed value from public records. *Considerations:*
  - Could implement reimbursement based on a sliding scale of home value
  - There is no direct link between property value and median household income: some high earners opt to live in modest homes while some lower income earners live in homes with steadily rising assessed value (particularly if they are long-time homeowners)
  - May adversely impact those customers living in transitioning neighborhoods and who are on a fixed/low income
  - May require additional staff to administer program
2. Third Party Means Testing: Third party administers a program that reimburses homeowners based upon a sliding scale using a percentage of Median Household Income. *Considerations:*
  - Provides the most robust approach to determine who qualifies and at what level by considering the entire financial picture
  - Third party in best position to look at customer's complete financial situation for eligibility
  - DW would not collect personal information from customers and therefore would not be responsible for data security
  - Customers over a pre-defined threshold do not qualify for reimbursement requiring those that have the means to pay their own way
  - Administrative fees would need to be negotiated but could be significant (DURA's fees were upwards of 20% of total loan amount)
  - Similar model is currently in place for our customer assistance program with United Way, with an annual fee of \$16,000
3. Denver Water Means Testing: Denver Water administers a program that reimburses homeowners on a sliding scale, based upon a percentage of Median Household Income. This would require Denver Water to request tax returns from homeowner to verify income. *Considerations:*
  - Collecting customers' personal identifying information creates risk in the event of data breach
  - Additional staff needed to administer means testing; would need to develop in-house process



- Determining the level at which one would qualify for low-income assistance in replacing LSL could be challenging and potentially arbitrary if Denver Water administers its own means testing program
  - Determining the level of subsidy based on income (a sliding scale) would run into the same problems as means testing but with more ambiguity at what level of subsidy should be applied to what level of need
  - Requiring customers to disclose incomes would require verification, and concerns about confidentiality could dissuade people from participating
4. Denver Water Modified Means Testing: Denver Water administers a reimbursement program that reimburses homeowners 100% if they qualify for any federal or state assistance program, with all others reimbursed at a lower percentage of DURA program reimbursement cost. *Considerations:*
- Collecting customer's personal information creates risk of data breach
  - May require additional staff to administer program
  - Accept means testing from outside benefit programs such as SNAP, Medicaid and free and reduced school lunch programs
  - Removes the burden from Denver Water at establishing the level of need
  - Removes the burden of applicants from a potentially difficult application process
  - 100% subsidy is likely the only level at which low/fixed income households would participate
  - High income earners would still be eligible for the lower reimbursement rate

**Approach**

This briefing paper is being provided for the Board's information and to help guide discussion and ultimately a decision on how Denver Water should approach Advanced Voluntary Lead Service Line Replacement Reimbursement with customers who choose to take this action. Staff is available to answer any additional questions, investigate different options or gather more information as the Board considers this important decision.

**Owner(s)**

Jim Lochhead, Chief Executive Officer  
 Thomas J. Roode, Chief Operations and Maintenance Officer

**Attachments**

None

Respectfully submitted,

Jim Lochhead, Chief Executive Officer

Thomas J. Roode, Chief Operations and Maintenance Officer

# DENVER BOARD OF WATER COMMISSIONERS

Meeting Date: January 8, 2020

Board Item: V-A-2

## Briefing Paper for Year-to-Date Continuous Improvement Update

### Strategic Plan Alignment

Lenses:  Customer Centric  Industry Leader  Long-Term View

Continuous Improvement (CI) is an integral part of how Denver Water will meet its Strategic Plan objectives, and it is threaded into the fabric of our four Strategic Plan perspectives. It is the application of employing best business practices and measurement in our day-to-day operations to increase efficiency and effectiveness in delivery of service to our customers.

### Summary

Denver Water began its continuous improvement journey over eight years ago, and CI is becoming deeply embedded into our culture as the way we do our daily work. Employee engagement and acceptance of the program has grown over the years. CI is at a positive tipping point in employee acceptance and utilization of CI tools and methodologies. Today, the CI team is focused on helping Denver Water achieve its Strategic Objectives and Programs through support of our Annual Business Plan and development of our people. This briefing paper provides an update of our 2019 activities and a look ahead for 2020.

### 2019 Update

CI's focus is to engage and empower our employees to make positive and productive change through their daily work to deliver clean, safe drinking water and advance our organizational priorities and programs. The effectiveness of this approach is evidenced by the "pull" from teams and individuals from the CI Section for help. These "pull signals" take the form of assistance on Current State Mapping, Rapid Improvement Events, full Value Stream Assessments, Choosing by Advantages workshops, A3 activities, and participation in the three-day CI Leadership workshop.

#### CI Engagement

In 2019, more than 200 people participated in Rapid Improvement Events (RIE's), 35 participated in Choosing By Advantages (CBA) events, 55 participated in Value Stream Assessment (VSA) events, and 126 people engaged in the CI Leadership Workshop events. More importantly, organic CI activity outside of formal value streams remains robust. Another measure of CI engagement is the use of visual process control. Throughout 2019 the use of visual process control across the enterprise continued to grow with almost 400 distinct teams using visual control to manage their work. Finally, the average CI quality score (as measured by post-event surveys) remained in the top box of the range (4.6 out of a 1-5 scale).

Metric	2016	2017	2018	2019
Quality	4.0	4.5	4.6	4.6
Participation	333	592	774	398*
Adoption of Visual Control	75	286	356	354

\*Participation drop in 2019 largely due to inactivity in three of the five 2019 Value Streams due to capacity pull on the OCR and ADP projects. (i.e., Safety Value Stream, Customer Experience Value, and Human Resources Value Stream).

#### 2019 Value Streams

In support of Denver Water's top priority of providing high-quality water and outstanding service to our customers, CI guides Value Stream level improvement

activities that cross multiple divisions. The Value Streams noted in the 2019 Business Plan are summarized below.

**Safety Value Stream:** 2019 was largely a preparatory year for the Safety Value Stream which launched the first stage of the Safety Maturity Index Project. The Safety Maturity Index (SMI) is a metric for evaluating safety that measures both the effectiveness of our safety programs and the maturity of our safety culture. It is measured across 8 Dimensions -- two lagging indicators of injuries and accidents, two quality metrics measuring employee competence and safety operations, and four cultural indicators of employee ownership, accountability, resilience and vigilance. The 2019 goals for the project consisted of appropriately weighting dimensions, validating the method of data collection and establishing the base line for the enterprise. The Safety Value Stream completed one RIE and two JDI's. The RIE focused on improving claims processing. The JDI's improved our Lock-out/Tag-out processes in Trades and Treatment and refreshed the Safety Policy. On the training front, the Safety Value Stream trained an additional 33 team members in the Smith System Safe Driving program and an additional 60 team members in verbal de-escalation techniques.

**Water Distribution Value Stream:** The Water Distribution Value Stream is Denver Water's best example of what good looks like relative to living a continuous improvement culture (as opposed to "doing" CI). Significant measurable results include: reducing DC Station Inventory by 80% in each station, implementing more than 115 Safety improvements, deploying 33 Environmental Compliance improvements, removing more than 100 cubic yards of physical waste, and achieving a 50% reduction in waiting time for external locate companies. This value stream drives the Outage Hours metric on our Balance Scorecard.

**Trades Value Stream:** The Trades Value Stream developed and is working on a 3-year strategic roadmap for Asset management as it relates to Trades and the development of associated improvement activities. The target state for this value stream is to have all *critical assets* identified throughout collection, treatment and distribution where the Trades Section is primarily responsible for operational maintenance. These critical assets will be maintained as the priority with defined service level agreements (i.e., predefined levels for quality, response time, responsibilities, etc.) with collection, treatment, and distribution.

**Human Resources Value Stream:** The resource pull of the ADP project resulted in a "pause" in the HR Value Stream in 2019. Nonetheless, the Director of HR has taken ownership of this value stream to allow for a refresh in 2020. The top improvement in this value stream is tied to Days to Fill open positions that went from 65 days to 45 days (improved by 31%).

**Customer Experience Value Stream:** The Customer Experience Value Stream received the results of the Customer survey in mid-July. The resource constraints driven by the Lead Reduction Program (LRP) and the OCR move have both contributed to this value stream becoming inactive. Given the potential for declining customer satisfaction due to the upcoming LRP, it is likely that the 2020 refresh of this value stream will focus on related customer experience issues. This value stream drives the Customer Satisfaction Index on our Balanced Scorecard.

### Organizational Priorities

The CI Section also supports multi-year organizational priorities through enterprise-level activities. Some of these activities take the form of Value Stream level improvement activities and others take the form of direct human development and mentoring across multiple divisions and sections. CI's support of the 2019 Organizational Priorities noted in the 2019 Business plan are summarized below.

**North System Renewal:** Since its inception, the NTP Team has fully embraced CI thinking with a mind toward improving how Denver Water delivers projects. They've done this by challenging conventional thinking and empowering all levels of the project team. Most notably, the project team embraced the principle of "celebrating our defects" by quickly identifying issues that are "red" and escalating these items on a priority basis. By encouraging and rewarding this behavior, the NTP project improves in real time. In 2019, the NTP project team effectively leveraged various CI processes. The team used Vertical Value Stream Maps (VVSM's) for IT Programming needs, standards development and process control narratives. Additionally, the team used Pull Planning techniques to coordinate the complex interactions between Denver Water, the CMAR and subcontractors. Finally, the NTP project team chartered several sub-teams to bring a strong CI focus to the construction phase of the project. These sub-teams included the Lean Leadership Team (LLT) and the Study Action Team (SAT). The SAT is currently implementing significant quality and cycle time improvements in the Request for Information (RFI) process.

**National Western:** The 4 Programs Value Stream teams completed a 4-year strategic roadmap for Policy, Education and Research and developed the associated improvement plans. The Value Stream completed five RIE's and 26 JDI's. Significant accomplishments included: development of an internal mechanism for coordinating, prioritizing, vetting and routing external requests from vendors; the creation of a policy chartering process for staff to utilize to filter and prioritize projects; and the construction of a process for coordinating organizational research efforts. In 2020, there will likely be two additional RIE's focusing on Enterprise-wide messaging and assessing Memberships/Sponsorships.

**Lead Reduction Program:** The Lead Reduction Program team kicked into high gear in Q4. This team developed and is now using Vertical Value Stream Maps (VVSM's) to manage all aspects of the program. The recently developed VVSM's include detailed planning for accelerated lead service line replacement, the filter distribution program, and overall communications, outreach, and education.

**Leadership Development:** We recognize that CI is closely aligned with the tenants of organizational development and we are placing a focus on teaching every Denver Water employee to stop and ask, "What can we do better in the future to improve quality, improve efficiency, or reduce cost." At its essence, we want to build an organization of problem-solving experts to further our vision of always aspiring to become the best. The CI leadership workshop sessions and the associated Coaching Kata sessions are some of the most impactful CI activities designed to develop this problem-solving competency across all divisions at Denver Water. With the creation of the Office of People and Strategy, the CI section and the Learning and Organizational Development (L&OD) section are beginning to work closely together. They partnered in the roll-out of the Leadership Competency program and they will work closely together in the future to ensure

consistency in training, messaging, etc. The work on leadership development drives our Employee Net Promoter Score on our Balanced Scorecard.

**2020 Objectives** For 2020, the CI team will continue to support the organization on its journey to aspire to be The Best Water Utility in the Nation by supporting the work of the 2020 Annual Business Plan through its corresponding value streams and identified CI activities. This includes the continued support of the value streams and priorities mentioned above as well as assisting with the development and implementation of the Enterprise Project Management Office and activities related to Phase II of the ERP specifically related to the financial system. Finally, CI will be working closely with the Organizational Development team to increase alignment and consistency of the offerings of the two groups – ensuring common language and synergy between classroom and online training and learn by doing (CI) with the objective of increasing the competencies of leaders at all levels across the organization.

**Owner(s)** David Winter, Director Organizational Improvement, Office of People and Strategy

**Attachments** 2019 Business Plan

Respectfully submitted,

David Winter, Director Organizational Improvement  Julie Anderson, Chief of Staff